SOME IMPORTANT PHASES IN THE EVOLUTION OF THE IDEA OF VALUE.

VALUE, PRICE, AND WORTH.

I.

VALUE AND PRICE.

THE idea connoted by the term "value" is intimately associated with the most remote experiences of the human race. Ever since it has been possible to predicate desirability of anything, have values existed. In the pastoral and even in the feudal periods, income was directly from the land and from services of villeins; exchange was largely barter; and it was not yet possible to use so large a term as "value" for so small a category as that where definite quantities of goods were exchanged against each other. Specialization of the term first became imperative with the advent of the industrial revolution. Then it was that men began to seek vehicles by which to convey their convictions upon economic matters; the metaphysical mind was called upon to supplement the political and mercantile; and "value" became a technical term.

But the technical usage of the term was not settled once for all; nor is it settled today; nor can it be settled so long as the race progresses or suffers change in its organization and civilization. Alongside of the primitive conception of "that which is desirable" will always exist a special conception limited by the scope of the particular investigation as to things desirable. Yesterday, the scope of this inquiry was quite different from what it is today; and tomorrow it will be still different. The point of view of the desirable must change with the physiognomy of each succeeding generation, and the economist, as the student of value, must propose very different problems to himself and take very different points of view, as time advances. The

problem of yesterday stands in the economic primer of today; and those who are content with its formulæ are behind the times. It is worth while to assemble a few threads of value theory, and to endeavor to place them in their true relation with the primitive conception.

In Adam Smith we find the two leading conceptions that have occupied the attention of later thinkers, already foreshadowed. That value tends to correspond with cost or expenditure was stated with considerable force, but with a lack of precision which indicated the necessity of much further discussion. But mixed up with this idea of exchange value was a much more general conception of labor as the *source* of value. He tells us that one commodity may be less variable than another; and that, of all commodities the least variable is labor.[1] Clearly he did not attach to value the sole meaning of proportion in exchange. If the exchange proportion of two commodities varies between two points of time, it must be possible to conceive that the cause of the variation lies in one of them to the exclusion of the other. The exchange theory of value, however, does not permit such a supposition. We are not allowed to inquire where the source and determinant of value lies. Careful writers of this school avoid the statement that cost of production is the *cause* of value; they tell us it is proportional to value. A change in value is a new proportion; that is all.

If we are allowed, however, to inquire as to the cause of change in value, then it is possible to claim that some commodity is less likely to cause such change than any other. Smith said that labor was such a commodity; and while he was far from the truth of later investigation, and was probably not unaffected by contemporary continental theories (which he was not unwilling to adopt in his contest with the Physiocrats), still we must credit him in this case, as in all others, with that virile common sense which has made his work enduring.

Jean Baptiste Say misunderstood Smith—a failing more venial in a foreigner than in a native. He interpreted Smith's

[1] *Wealth of Nations*, book i. chap. v.

theory of cost of production narrowly to mean "labor to the exclusion of capital," instead of the broad and liberal interpretation of "labor" as a general term for expenditures of any sort. Capital being productive as well as labor,[1] the latter could not be the sole source of value, although it is true that capital and labor enter into production in similar proportions, since labor is limited by capital. But Say, while in terms denying his master, was really making valuable additions to Smith's vague notions. The only satisfactory analysis of value was stated to be the *utility* added to matter by capital and labor.[2] But the age was not ready for the idea. Say's "utility" soon lapsed into vulgar "usefulness." The Smithian conception, which was perhaps that of a sustained average of human expenditure which was to form a sort of court of appeal in all cases of value occurring not only at any given moment, but from age to age, was not dreamed of. However, the very use of the term "utility" marks an advance towards the conception of value as a category of utilities.

Ricardo considered utility (usefulness) to be a necessary concomitant of value. It was a sort of inductor of value. It acted like butter to precipitate salt in the salines by its mere presence, without combination. Scarcity, also, would undeniably create value; but it was not imagined to link scarcity and utility firmly together. Taking things as they go in this busy world, the general measure of value was labor. But it was absurd in Smith to talk of labor as a measure in any other sense than in that of exchange. A commodity will not purchase the same amount of labor that it took to produce it. The sole means of determining whether a commodity has risen or fallen in value, is by comparing it with a great number of other things. This test will show that labor is just as variable in value as anything else.[3] An invariable standard would show, not whether wages were high or low, but whether more or less labor were expended on the article. Even then the query remains whether it is labor that

[1] *Political Economy*, book i. chap. iv.

[2] *Political Economy*, book i. chap. i.

[3] *Political Economy*, chapter on Value, sec. i.

has risen, or the article that has fallen.[1] Certainly no commodity can be such a standard, because if the proportion of capital and labor entering into the standard and the article to be measured vary there is no reason for saying that the one has changed in value more than the other.[2] Thus Ricardo, while he develops to a high degree the idea of exchange value, rejects utterly the Smithian hints as to an absolute standard to be founded upon an analysis of the notion of labor, little surmising that he himself, in his great doctrine of marginal production, had furnished to the world a new category within which the Austrian school were to work out fully the vaguer Smithian conception.

Ideas are instruments towards definite ends, and their development is subject to an extension into the psychic world of that law of survival of the fittest which has been shown to play so large a part in the organic world. Ideas, then, must be related to the times whose interests they are meant to subserve. Constant experiments are being made in the psychic world. All are rejected except that one whose results subserve the most and greatest uses. As time moves on, the erst successful idea is shorn of many of its applications, and finally disappears or is completely transformed to suit new circumstances.

This statement is peculiarly true of the idea of value. At the discovery of America, this idea was chiefly associated with military predominance in inquiries as to the true source of the greatness of the state. With the advance to the mercantile phase of national activities, the military idea still surviving but gradually waning, attention was turned more towards material wealth. Speculation on this point made countless experiments, the most nearly successful of which was that of the Physiocrats, and finally reached equilibrium in the exchange-value of Adam Smith and Ricardo. But the scene has again shifted. Exchange value is shorn of much of its former importance. It still has, indeed, its part to play as the weapon against exaggerated state-interference. But new circumstances are calling for new ideas. Formerly the

[1] *Political Economy*, chapter on value, sec. iii.

[2] *Ibid.*, sec. vi.

inquiry was about the wealth of nations; now it is about the wealth of individuals. Free trade was to enrich nations; free choice is the inalienable quality of individuals, and upon free choice is founded a theory of value which shall refute the parasitic socialist theory (which was founded upon the doctrine of free exchange of equal amounts of labor, and was hurling the economic scheme into chaos), and shall again render a rational account of the prevailing régime.

The new doctrine is, therefore, relative to its environment, and its survival depends upon the uses to which it may be put. Besides that of combating the socialists, the other one has been imagined of fully explaining the vaguer Smithian notion of value, and thus of placing the question of deferred payments upon a sound basis. If this attempt shall succeed, economic science will have registered its most signal triumph. It will have settled the most important of all questions of justice. For questions of justice are simply questions of natural law.[1] Deferred payments is, *par excellence*, the question of the day, and the theory which shall settle it will acquire a lasting supremacy. In a sketch of the development of technical concepts of value, some explanation of the application in question must not be omitted.

Ricardo interpreted Smith's "labor" quite materially as "day's labor." Smith, we have seen, had a further conception — an instinctive feeling that somehow the man-commodity, the labor, must be the standard of all others. The technical concept "utility," hastily glanced at by Say, and rather too metaphysical and mathematical for Ricardo's practical and arithmetical mind, is nevertheless the fruit of Smith's intuition. The question which has grown to full stature today remains the same which Smith saw in the shadow of coming things long ago, one of a standard which should establish value *in time*. The Ricardo-Mill concept is purely momentary and static. Regarding the mass of commodities produced through time as a column, that school took value as a section of the column at a given height.

[1] See the present writer's article on "Distributive Justice," *Nebraska Literary Magazine*, May 1895.

The new concept is worked out through subjective value. A man carries his pleasures and his exertions to the point where the margins of pleasure and of sacrifice correspond, so that the last increment of pleasure exactly repays the last dose of labor. Taking the margins in each case as determinants, we may find the subjective value of his total pleasure by dividing it by the marginal pleasure. In the same way we may find the subjective value of his total sacrifice by dividing it by the marginal sacrifice. Now to the man these ratios of values must be equal. At a different point of time, the same method of measurement holds true; and the values obtained in this way are homogeneous quantities, capable of direct comparison. The man has a means of determining whether he is getting and giving more at one time than at another.

Again, if a man acquire goods, the total satisfaction derivable from the goods does not increase so fast as the stock of goods increases; the marginal increment of pleasure does not decrease so fast as the stock of goods increases: the subjective value of a given addition to the stock will decrease, but not in proportion to the increase of the stock. The last amount of satisfaction which he cares for under the circumstances will indicate exactly his point of view as to the value of pleasure to him. If, therefore, we divide the amount of goods corresponding to the last amount of pleasure into the whole stock we shall obtain a figure representing the subjective value of the goods; and this method will apply to all different moments. The marginal amount of pleasure decreases, the marginal amount of goods increases; consequently, when the total amount of pleasure increases, the stock of goods must increase more rapidly.

The same reasoning is true of value calculated on the basis of the ratio of the whole stock to the increment that corresponds to the last dose of labor applied in order to procure it. If the stock increases faster than the amount of pain that corresponds to the last increment, that is, if the rate of product to expenditure increases relatively faster than the stock increases, then the value of the stock increases faster than the amount. If the stock

increases more slowly than the effort to obtain the last increment increases, then the value of the whole stock increases less rapidly than its amount increases.

This, then, is the law of subjective value. Now, how are we to derive from individual experience a law of value applicable to the generality? How far is the experience of the individual true of the community? This important question is sought to be answered by translating subjective into objective values; and this result, again, is accomplished by a modification of the former method. Evidently the community is not concerned with that portion of the individual's pleasure which is peculiar to himself and in which it has no share. Neither is the community concerned with that portion of the individual's costs which is peculiar to him and does not constitute a charge upon it. The result is that in any consideration of values as affecting the generality rather than individuals, both consumer's and producer's rent, both the credit and the debit side of rent, must be excluded. The total pleasure of the community as such is simply the satisfaction afforded by the last increment of goods multiplied by the number of increments; the total pain is equal to the total number of increments multiplied by the cost of the last increment. Hence, if we desire to compare the objective value existing in the community at two periods, we simply compare the ratios of the stocks to the increments corresponding to the last pleasures or efforts.

In this case, as in the case of subjective value, total value increases *pari passu* with stock only when the stock increases as fast as the ratio of pain to the last increment of goods increases; and increases less rapidly than stock in all cases where marginal cost increases more rapidly than marginal product. The difference between the two cases of subjective and objective value is simply this, that the mass of pleasure or pain is greater in the former case than in the latter, so that total subjective value (commonly called utility) increases more rapidly than total objective value.

The difficulties in the way of this process of reasoning are those which affect every application, by general averages, of

reasoning which can be more precisely posited for individuals. If it is hard to conceive of a last effort and a last increment in the case of a man, how much harder in the case of a community; while the conception of consumer's and producer's rent in the latter case may seem almost to pass comprehension. Rent as a category of distribution affects individuals as a plus or minus, but is neither a cost nor a profit to the community. The greater capacity which one purchaser has above another, of enjoying or of utilizing his purchase, does increase its advantage to him. Undoubtedly, the greater capacity which one nation or generation has of enjoying or utilizing its products increases their value to it. The difficulty is in forming any economic conception of the power of enjoyment or of utilization possessed by a people or a generation. Marginal efforts are more tangible. Some class will always be the one that is just willing to purchase; and the whole stock of goods is capable of statistical ascertainment. It is on the ground of indefiniteness, intangibleness, and unreality rather than on that of metaphysical inconceivability that the reasoning of Professor E. A. Ross[1] seems more open to criticism than that of the late Dr. L. S. Merriam.[2] It is possible to conceive of a community as making a last effort for a last enjoyment, for the last effort of a class is, in a sense, the last effort of a community; but can we conceive of the community, *as a community*, as receiving uniformly larger returns for early doses of labor, or uniformly greater pleasure from previous returns? The authority of Professor Alfred Marshall seems to be against this conception.[3]

The discussion as to the question of justice is given in outline by the accompanying table, which presents the application of the four theories so clearly stated by Professor Ross, to the cases of rising and falling prices under the suppositions (1) that the cause lies in money and (2) that it lies in commodities. The

[1] "Total Utility Standard of Deferred Payments," E. A. Ross, *Annals of the American Academy*, November 1893.

[2] "Theory of Final Utility in Relation to the Standard of Deferred Payments," *Annals of the American Academy*, January 1893.

[3] *Principles of Economics*, vol. i. book iii. chap. vi. sec. 2.

TABLE SHOWING DIFFERENT SOLUTIONS OF THE QUESTION OF DEFERRED PAYMENTS

<table>
<tr><td colspan="8">when prices rise</td><td colspan="8">when prices fall</td></tr>
<tr><td colspan="4">because gold falls, i. e., money is more abundant.</td><td colspan="4">because commodities rise, i. e., are less abundant.</td><td colspan="4">because gold rises, i. e., money is less abundant.</td><td colspan="4">because commodities fall, i. e., are more abundant.</td></tr>
<tr><td>labor theory</td><td>commodity theory</td><td>objective value theory</td><td>subjective value theory</td><td>labor theory</td><td>comm. theory</td><td>obj. value theory</td><td>subj. value theory</td><td>labor theory</td><td>comm. theory</td><td>obj. value theory</td><td>subj. value theory</td><td>labor theory</td><td>comm. theory</td><td>obj. value theory</td><td>subj. value theory</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td></tr>
<tr><td colspan="4">circulation should be decreased so as to restore old prices.</td><td>the same am'nt of money should remain in circulation. Less commodities means harder to produce them.</td><td>more money should be put in circulation in order that creditors may obtain as many commodities as before.</td><td colspan="2">more money than in 5 but less than in 6. 8 requires somewhat less money than 7.</td><td colspan="4">circulation should be increased so as to restore old prices.</td><td>the same am'nt of money should remain in circulation. More commodities means easier to produce them.</td><td>less money should be left in circulation in order that debtor may not have to return more commodities than he received.</td><td colspan="2">less money than in 13 but more than in 14. 16 requires somewhat more money than 15.</td></tr>
</table>

conclusion is that in every case where a change in general prices is due to the circulating medium, then the amount of money should be increased or diminished so as to bear the same proportion to commodities as before. When, however, the change is due to commodities, the answer varies for the four theories. When prices fall, then, in the case of the labor theory (13), the same amount of money in circulation will buy only as much labor as before. It will buy more commodities; but more commodities are now produced by the same labor, and the creditor is entitled to the produce of the same amount of labor. In the case of the commodity theory (14), however, the creditor is entitled to exact from the debtor only the same goods which he originally parted with; and this can be accomplished only by increasing the money in circulation as fast as commodities have multiplied, so that a dollar will buy precisely the commodities it bought before. Under the theories of objective (15) and subjective (16) value, the amount of money should be so increased that the creditor cannot exact the amount of labor from the debtor that he was entitled to when everybody was working harder than now; while the circulation should not be increased so that a return of the same amount of money will only entitle the creditor to exactly the same amount of goods, and he be thus debarred from all share in the increased productiveness of labor and the consequently increased wealth of the community. According to the objective standard, the circulation should vary as the quantity of goods divided by the marginal amount or determinant of value. This determinant is to be found by taking the ratio of quantity of the last effort of the community to the amount of goods produced by it.

Just how this theory may be materialized into the practice of everyday life has not yet been explained. The process would be somewhat as follows: in the first place, we have the means of establishing directly the proper correction for the commodity theory (6 and 14), as well as for 1, 2, 3, 4, 9, 10, 11, 12. It is the irony of the history of economic theory, and a proof that the author of a theory is often little aware of the uses which it may

subserve in the free competition of ideas for survival, that Jevons, the champion of the subjective theory of value and the arch-opposer of Ricardo's value in exchange, should have advocated a principle of deferred payments which Ricardo himself advocated consistently with his own principles; and that Jevons, further, should have furnished the most elaborate data and processes for the realization of this principle of deferred payments in his tables of prices founded upon articles in common use, and hence commonly known as the Standard of Desiderata, or Tabular Standard. It is, however, only historic justice, that when we have found, through Jevons' system of average variations, the amount of money that will satisfy the average increase of commodities, we should then use these data to obtain a quantity of circulation that will answer the theories of which W. Stanley Jevons is the honored author.

How then are we to find the marginal effort and the marginal product? The task is not hopeless, but needs careful separate study. It might be possible to take a certain industry as typical of the average of the increase of product and decrease of effort. The question of effort would again be complicated by the fact of co-operation of capital with labor. Laying aside the myriad niceties which would severally go to the root of wide realms of ethics and of value theory, we may suppose that the exertions of labor are now carried to only eight hours while they were previously carried to ten. Suppose further that the exertion of eight hours produces a product of four, whereas, at the former period, an exertion of ten hours only produced a product of three. Therefore three-fifths multiplied into the amount indicated by the commodity standard indicates the amount demanded by the objective standard and marks the diminution from the total returns of labor which the creditor must concede on account of the generally less intense effort which prevails in the community.[1]

[1] Suppose the comparison to lie between the years 1880 and 1890.

	Amount of Goods	Hours of Labor	Marginal Product
1880	x	10	3
1890	y	8	4

Then the determinant for 1880 is $\frac{3}{10}$ and for 1890 is $\frac{4}{8}$, and the ratio of increase of wealth is

$$\frac{8y}{4} \div \frac{10x}{3} = \frac{3y}{5x}$$

$\frac{y}{x}$ is found by the tabular standard. It only remains to multiply by $\frac{3}{5}$.

That some such result must be reached both history and the doctrine of evolution inculcate. In days of slavery absolute ownership of the slave and of his product was justifiable. Man was not free physically because he was not free mentally and morally. Greater inventiveness, wealth, and freedom went hand in hand; the master, now become creditor, was compelled to diminish his claim on the slave, now become debtor, just in proportion as invention had, by increasing the general wealth, decreased the strenuousness of life. We thus see the question of deferred payments placed where it belongs today as the central point of economic doctrine.

In order satisfactorily to answer this question, it is true, we must also answer every other question of social evolution. The socialist who claims that man is still a slave, is provided mathematical means of measuring the degree of slavery, if he choose to employ so inappropriate a term. The demagogue who rants about the oppression of one class by another, is furnished food for reflection on the oppression of each class by itself. Above all, this investigation is impossible without previous agreement that the question of value is identical with the question of justice; and that when we have established what value is, then we have also established the principle of justice for the category in question.

The question of prices is quite foreign to exchange value. Ricardo is authority for the quantity theory, according to which a large or a small amount of money may equally well serve to transact the sales of the community. The chief use of a dissemination of the truth contained in this statement will still be to dispel the vulgar confusion of money with wealth. The general level of prices has nothing to do with wealth, nor, indeed, with its distribution, except in the large class of cases in which we are here especially interested, of outstanding obligation—*debitum in præsente, solvendum in futuro.* This is just the class of cases that comes under the theory of objective values. The question of prices is therefore the question of objective values, and in the

solution of this question it makes the greatest difference in the world whether the cause of the new ratio of exchange lies with the one commodity or with the other, with money or with goods.[1]

In concluding the statement of the objective phase of the development of the technical idea of value, attention must anew be directed to the grave difficulties which attend the utilization of this phase for the solution of the question of deferred payments. On the success or failure of this attempt must largely depend the survival of this phase. The difficulties alluded to are precisely those which accompany all generalizations from individual experience to that of the community. The community is an organization rather than an organism,[2] and it should strive to help the individual when he is made to suffer by the action of a social norm. There is no instance in which social laws act more ruthlessly of individual interests than in that of deferred payments. A change in the volume of the circulating medium affects all absolutely and generally. If it is right that the law should act universally (and the meaning of the term is an admission of the right) it is obvious that we must be extremely careful in our generalization. If it seems to us that debtors are suffering, and that our adjustments of finance will relieve them, it may turn out that the debtors are the wealthy, while the crediitors are the poor. Whichever way we legislate, some will suffer, and it will be a colossal task to show that none of this suffering is caused by our legislation. Mere progress does not demand so much of us, but our sense of the ideal does. Progress allows suffering; idealism forbids it.

[1] Professor F. W. Taussig remarks: "The appreciation of gold *is* the general fall in prices. The two are not related as cause and effect, they are simply two names for one and the same thing — namely, a different rate of exchange between gold on the one hand and commodities in general on the other, by which the same amount of gold buys more commodities than before." This statement is perfectly true of exchange value. Professor Taussig is, however, here speaking of objective values: "Nevertheless, the improvements in production do seem to me to have an important bearing on the question in hand: a bearing not on the simple fact of the appreciation of gold," etc.—*The Silver Situation in the United States*, p. 106.

[2] FRANKLIN H. GIDDINGS, *The Theory of Sociology*, p. 74 (Supplement to *Annals of the American Academy*, July 1894).

In reasoning from the individual to the community, we are committing the sin of supposing the "economic man"; but this much abused person is, nevertheless, up to the present writing, an economist's necessity. The community has no "last buyer"; it certainly has neither pleasures nor pains; and the rule that is satisfactory to one pair of creditor and debtor may be unsatisfactory to another. In adopting a general rule we must show that those who are not satisfied nevertheless ought to be and would be if they knew enough and if their altruism were developed up to a point indicated for the community. While, therefore, the doctrine of marginal utility is applicable with hesitation to a community, it contains germs of suggestion that may carry us, by analogy at least, far toward a practical solution of the question of deferred payments.

II.

WORTH.

Viewed from the individual standpoint, however, it is clear that neither the labor theory nor the commodity theory can stand for a moment (see table). According to the labor theory, if commodities multiply, (13) the creditor is entitled to a return of what the same amount of labor will produce which produced the commodities with which he originally parted, and therefore prices should fall exactly as much as goods have multiplied, *i. e.*, been more easily produced. Suppose the creditor supplied certain machinery. Such machinery is now produced more easily and proportionally more should be returned. But now suppose that there is a greater demand for such machinery; for some reason it has become more desirable than before. We have here an effect independent of abundance, due to an absolute change in people's tastes. Is the creditor to be allowed to reap the whole benefit of increased productiveness and to make no abatement on account of the greater desirability of the article, in spite of its greater abundance? The most casual observer of the subject will answer at once that the circulating medium

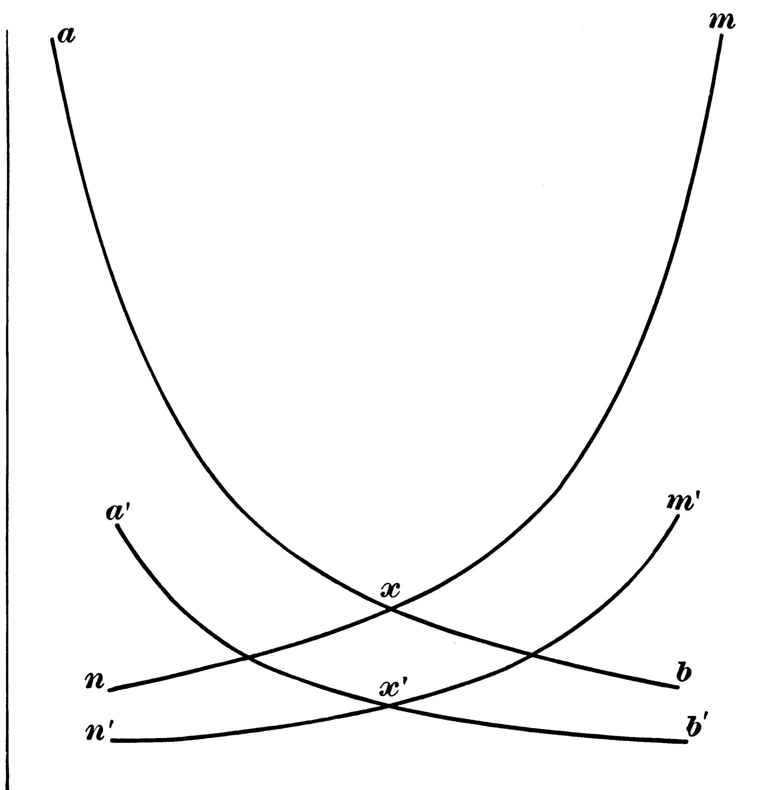
should be increased exactly enough to allow the debtor to retain that portion which is not due to labor but to taste or desire. This is simply an acknowledgment that the utility and hence value of the machinery has not decreased so fast as its quantity has increased.

The commodity theory (14) is also not tenable for a moment, for the obvious reason that if the circulation is so increased that the debtor is compelled to return only the machines he borrowed the creditor cannot exchange them for nearly as much as he could originally; still they have not depreciated so fast as machines have multiplied, because there is a greater demand for them.

This further examination of the incapacity of old conceptions to answer the burning questions of the day leads us to inquire whether the new appreciation of the part now known to be played by the inner and the outer worlds in the question of value may not shed some faint ray on its future. In order to place the matter in its simplest light, the reader's attention is bespoken for a most elementary use of the graphic method (see accompanying figure).

As inventions increase in a community and cost of production decreases the supply curve mn will move to the right, producing the supply curve $m'n'$. Fall in cost will lessen the price at which a person is willing to purchase each amount of the commodity, and thus move the demand schedule to the left. The demand curve ab becomes $a'b'$. The equilibrium price x becomes x'. It is possible that advance in the arts has reduced price in this way for all commodities, except the one in use as the medium of exchange. Since the prices of all things are proportionally reduced, general exchange values remain the same, while increased cheapness is apparently accurately recorded by the general fall of prices.

If, however, the advance in the arts extends to the medium of exchange, this measure of cheapness will disappear. If the supply of the standard commodity had remained constant, $m'n'$ and $a'b'$ would have covered all questions of price; but the



a
m
a'
m'
x
n
b
x'
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lowering of the exchange value of the standard has raised prices again, restoring x' to x, and $a'b'$, $m'n'$ to ab, mn.

Suppose, however, that the standard alone is unaffected by the advance of the arts. Do we have in the cheapening that appears to have taken place a true record of the greater abundance of goods, in every sense of the term, including the want of them; in other words, a true record of the increased wealth of the world? By no means. The supposition is that the demand curve has moved to the left because the supply curve has moved to the right. But such change in the demand curve for one good or for all goods may result from other causes. Scarcity is not the only reason for high values. The diamond is esteemed absolutely for its brilliancy as well as relatively for its rarity. It would be possible to claim that the love of brilliancy itself is the result of outer influences upon the individual or upon the race. But our supply curve may typify all outward influences, if we will; besides, the practical limits of our science allow the supposition of an inner and an outer when some other science does not step in to forbid us from making the distinction.

A change of distributive efficiency in a single commodity with respect to all other commodities, or of all commodities with respect to the standard, when due solely to an inner and hence one-sided influence on the value intersection, may properly be called a worth change. The price of an article is the result both of scarcity and of worth. If the demand curve is moved to the left by increased supply, it will be moved further to the left by decreased worth. If, therefore, from the total diminution in price we subtract that due to abundance, we have left that due to worth. In the more common case the fall in price is retarded by worth. If, therefore, from the change in price that would have taken place had abundance alone operated, we subtract the change that actually occurred, we have left the actual increase in worth.

Both worth and objective value are wholly the result of subjective estimate; but objective value is partially a reaction from change in cost. Worth, however, is the result of mental or

moral convictions independently of the supply of the commodity.

So elementary an explanation of worth has been given because it is in this direction that the future of the technical conception of value lies. The technical conception of value as a category of utility actually paves the way to the realm of spiritual goods, of a psychic economy, and of an ethical régime. Far as this future may lie before us, it is nevertheless the direction in which society must progress. The satisfaction of material wants is derisory if it pave not the way for the satisfaction of the spiritual. Nor is this future completely shut off. The categories of progress are not separated by definite moments of time. The stone age and the lake dwellers are still represented by Digger Indians and Laplanders. A technical conception of worth may be useful even today.

If a community becomes convinced that material wealth is not, after all, so great a good as it was previously esteemed, then the exchange value of all material wealth will fall with its decreased worth, in so far as it is exchangeable against immaterial. Various useful results will ensue. A higher worth of science might cause a people to confide its finances to experts, who, by a consistent fiscal policy, including, perhaps, the establishment of an objective standard of deferred payments, would do much to avert crises and even do away altogether with the necessity of the precious metals as the means of final payment. The exchange value of the precious metals would consequently decline, and that of other metals of more rational worth would advance. Thus a step would be taken toward the Utopia of Sir Thomas More, where iron was more esteemed than gold. When all things exchange according to worth, they will all exchange according to their ideal usefulness—the first notion of value to suggest itself to men, the last to become clearly disengaged. Suppose, again, that workingmen lost their unreasonable hatred and distrust of capitalists through a high worth of brains and patience. They would then gladly adhere to the decisions of boards of arbitration. They would see in the savings, patience,

and ambition of others the means of their own enrichment. The problems of capital and labor would remain, but the cleavage between capitalists and laborers would disappear. Temperance would increase. Laborers would be also capitalists, and it would be recognized that capitalists are also laborers.

Worth changes can occur but slowly. Worth is an element of objective value, and like it must express a general or average rule as to the state of popular estimate. The truth of yesterday is the truth of the people. The popular mind but lamely and partially appreciates the complexity, significance, and possibilities of society. Its ideas have been formed by the experiences of the distant past. Some thinkers deny that progress has any rational sanction. Most people do not advance in education beyond the common school. The common school inculcates inventions and discoveries of the Chaldeans or early Arabs. The secondary schools, academies, and colleges instil results accomplished by the Greeks, Romans, and Mediævals. It is the university alone that seeks to synchronize men's minds with current events; to seize and transfigure as static entities the norms of the fleeting hour; to make the truth of today the truth of the people. Just in the degree that popular intellect advances from the common school plane to that of the academy and of the university, will the technical conception of value so change that worth will be equivalent to utility, and utility to usefulness.

The term "value" is, then, a tool of thought, which has varied in its mechanical construction with changing needs of premises for arguments. In exactly the same way, the term "card" has connoted, first, a simple hand tool, and later a complicated steam-driven mechanism. The Ricardian school employed "value" for the ratio in exchange which corresponds to relative sacrifices or expenditures. The newer Austrian school uses it for an estimate of relative usefulness, called "utility," which has been defined with metaphysical refinement, if not with mathematical precision. While the conception seems to carry us completely away from exchange ratio, it really does nothing of the sort. The old conception began with an imper-

fect appreciation of the element of time. "Labor" was often taken too literally, and not as a broad term for sacrifice. The Ricardian school, especially Cairnes, sought to remedy this defect; but they could not efface from men's minds the cruder concept. It was, therefore, simply a further and an easy differentiation for a new learning to arise which should lay the chief stress of its reasoning upon the disputed and ambiguously comprehended element of time. It was by freely employing and analyzing subjective and objective values that the new school were enabled to accomplish this result. They have, perhaps, gone too far. It would have been sufficient to demonstrate the important part played by time in establishing values. But it was thought necessary to represent it as the sole instrument employed by choice to the exclusion of labor, which was thus left, as on former occasions, as the residuary legatee of fashion and capital.

It is wrong to regard the new conception as essentially contradictory of the older. It is larger and more comprehensive. The progress of the science demands it. To say that "value" is the one conception and not the other, is totally beside the mark. And yet it is proper to agree on the contemporary use of the term. The burden lies certainly upon those who propose to remove it from the meaning in which the Ricardian school has so firmly fixed it, of ratio in exchange. The newer conception is that of an objective utility, which is the result partly of inner choice and partly of the effect of scarcity upon choice, or, as it said, of want and provision for want. This conception must continue, for the present, to be called "objective value." When we seek to modify prices in such a way as to mete out justice in cases of deferred payments, it is not to "value," but to "objective value," that we must appeal. The question of prices is the question of the number of counters to be used in exchange, and that is a question of objective value.

The content of the term "economics" is itself a creature of our own times. Glancing into the future from a point of view already suggested, what we behold answers less and less to the present conception. We view philosophy and art, as in ancient Greece,

again most prominent. We become aware, as never before, that our own day is pre-eminently one of commerce and trading, of exchanges and payments, and of industrious toiling and moiling. The new scene is perhaps not exactly that which the new school meant to present to us when they were struggling to extricate the science from the socialist bog into which it had fallen. In this scene, exchange values are no longer visible. They are forgotten with the days of effort and struggle. Objective values, even, are recollected as an historical curiosity. Former objects of value are now as the spontaneous products of the tropical sun. Choice is perfected, for individuals have attained the capacity of consuming exactly that which conduces to their highest welfare. Scarcity and ignorance no longer affect choice.

If this genus of choice is "utility," it is certainly a different sort of utility from that which the new school meant to show to us. It is "worth," which, we may suppose, in Arcadia supplants all technical conceptions of value. When we choose only that which we should choose in an ideal state, then we consume goods according to their true worth. It is true that there is a worth of today which is far from Arcadian, but, in proportion as the world so improves that men may and do consume in the manner indicated, then that general category which the race will indefinitely continue to predicate as "value" will specifically approximate to "worth." The time is even now at hand when some such distinction in terminology may help towards scientific clearness.

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